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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,137	04/02/2004	Scott Kerwin	146185 (553-1102)	1504
45436	7590	04/02/2010	EXAMINER	
DEAN D. SMALL THE SMALL PATENT LAW GROUP LLP 225 S. MERAMEC, STE. 725T ST. LOUIS, MO 63105			FISHER, MICHAEL J	
			ART UNIT	PAPER NUMBER
			3689	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docket@splglaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/817,137	<b>Applicant(s)</b> KERWIN ET AL.	
	<b>Examiner</b> MICHAEL J. FISHER	<b>Art Unit</b> 3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-18 and 20-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-18, 20-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3,5,7-18, 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PAT 6,270,460 to McCartan et al. (McCartan) further in view of US PAT 5,487,386 to Wakabayashi et al. (Wakabayashi).

As to claims 1,24, McCartan discloses a method for tracking use of an ultrasound probe (title), storing "different types" of tracking information in the probe (col 4, lines 61-64), which tracking information would include probe information (such as how many initializations occurred in that probe) , accessing the stored tracking information within the ultrasound probe (col 6, lines 23-27). McCartan does not, however, teach storing the information in a connector of the probe. McCartan does teach using the system to send messages (steps 610,710, 810), therefore, it would have been obvious to one of

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ordinary skill in the art to save the message to ensure that only those probes which require disabling are disabled and to save a record to show why the probe was disabled. Further, the examiner takes Official Notice that external drives (such as so-called Zip or thumb drives) of old and well known in the art and therefore, it would have been obvious to one of ordinary skill in the art to use an external drive, which would necessarily be connected to the probe, to save the data in order to ease transference of the data and to ensure that it is saved.

McCartan does not, however, teach the data stored as being duration of use information and probe usage pattern information.

Wakabayashi teaches an ultrasonic probe (title) that stores time data in a memory (25, as best seen in fig 1), operation time data (which would include time for each use as it is shown to be cumulative, as at 25 in fig 1) would be "usage pattern information" as this could be used as information for usage pattern analysis.

It would have been obvious to one of ordinary skill in the art to modify the probe as taught by McCartan with the time usage information as taught by Wakabayashi as both teach an ultrasonic probe with memory for tracking use and time use would be important, as is taught by Wakabayashi.

As to claim 2, the information is updated based on the use (the fuses blow after use), storing the updated tracking information (col 6, lines 23-27).

As to claim 3, the data includes duration of use (col 4, line 59).

As to claim 5, the information can also be mode of operation information (col 5, lines 2-7).

As to claim 8, the storing is done periodically (upon initialization).

As to claim 9, McCartan discloses saving information within a system in connection with the probe (col 6, line 64-col 7, line 4).

As to claim 10, the memory is in the probe (col 6, lines 23-27).

As to claim 11, there would inherently be a predetermined address or else the information could be saved in the wrong place and thus, not be retrievable.

As to claim 12, the memory is non-volatile (col 6, lines 41-43).

As to claim 14, the information is retrieved from the probe (col 6, line 64-col 7, line 4).

As to claim 16, the data includes duration of use and is updated (col 4, line 59).

As to claim 17, probe usage is tracked (col 7, lines 6-9).

As to claim 18, the information includes cumulative tracking information and current use information (the number of fuses blown would include both cumulative tracking information and current use information as the fuses are blown upon powering up).

As to claim 25, the memory is accessed by the scanner as it is inputted from the scanner.

As to claim 26, there is inherently an interface for reading from and writing to the memory as the information is read from and written to the memory.

As to claim 27, the data includes duration of use (col 4, line 59).

As to claim 15, the data includes duration of use (col 4, line 59), which is when the probe is connected to the system, there is probe identification information in the probe (col 7, lines 1-2), storing the information, including duration of use in the probe (col 6, lines 23-27).

McCartan does not, however, teach storing the information outside the probe. McCartan does teach using the system to send messages (steps 610, 710, 810), therefore, it would have been obvious to one of ordinary skill in the art to save the message to ensure that only those probes which require disabling are disabled and to save a record to show why the probe was disabled.

As to claim 5, it would have been obvious to one of ordinary skill in the art to use mode of operation information as different modes of operation affect the probe in different ways.

As to claim 6, it would have been obvious to one of ordinary skill in the art to modify the system as taught by McCartan by using probe temperature information for tracking as the temperature at which a probe operates affects its lifetime.

As to claim 7, McCartan does not specifically teach storing the information when the probe is turned off, however, as McCartan teaches storing time of use information, it would have been obvious to one of ordinary skill in the art to store the information when the probe is turned off as turning off the probe affects the duration of use.

As to claim 13, it would have been obvious to one of ordinary skill in the art to access the information upon powering up the probe as, otherwise, a probe that should be disabled could be used if the information is not checked before use.

As to claims 28 and 29, the type and number of memories are considered to be a matter of obvious, engineering design choice and would not render the instant invention patentably distinct, further, McCartan teaches multiple, erasable, reprogrammable memories (eeprom, 14,15 and 16 as best seen in fig 1).

Claims 4, 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCartan in view of Wakabayashi as applied to claims 1-3,5,7-19 24-29 and above, and further in view of US PAT 7,156,551 to Ramamurthy et al. (Ramamurthy).

As to claims 4 and 20, the data includes duration of use (col 4, line 59), which is when the probe is connected to the system, there is probe identification information in the probe (col 7, lines 1-2), storing the information, including duration of use in the probe (col 6, lines 23-27).

McCartan does not, however, teach storing the information outside the probe. McCartan does teach using the system to send messages (steps 610,710, 810), therefore, it would have been obvious to one of ordinary skill in the art to save the message to ensure that only those probes which require disabling are disabled and to save a record to show why the probe was disabled. McCartan further does not teach checking and storing temperature information.

Ramamurthy teaches a method of checking faults in ultrasound equipment (title) using temperature (Abstract, line 1-line 3). It would have been obvious to one of ordinary skill in the art to modify the system as disclosed by McCartan with the temperature-checking feature as disclosed by Ramamurthy as both are directed toward

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ensuring the proper functioning of ultrasound equipment and further, Ramamurthy teaches this as being used to upgrade ultrasound equipment already in use (abstract, lines 8-10). It would have been obvious to one of ordinary skill in the art to use a thermistor as this is a well known way of recording temperature readings.

As to claim 21 McCartan does not specifically teach storing the information when the probe is turned off, however, as McCartan teaches storing time of use information, it would have been obvious to one of ordinary skill in the art to store the information when the probe is turned off as turning off the probe affects the duration of use.

As to claim 22, McCartan does not teach periodically tracking and storing the information during a current scan. It would have been obvious to one of ordinary skill in the art to periodically track and store the information in case of a power outage so the data is not lost.

As to claim 23, the memory is non-volatile (col 6, lines 41-43).

### ***Response to Arguments***

Applicant's arguments filed 12/18/09 have been fully considered but they are not persuasive. As for arguments in relation to time duration, as the prior art teaches cumulative time use, it therefore saves the time of each use, thereby meeting the limitations as claimed. As to arguments in relation to the "thermistor", this is merely another, well known, device for tracking temperature and therefore, its use in tracking temperature is neither new nor surprising. .



Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. FISHER whose telephone number is (571)272-6804. The examiner can normally be reached on Mon.-Fri. 7:30am-5:00pm alt Fri. off.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MF  
3/29/10  
/Michael J Fisher/  
Examiner, Art Unit 3689